

face of the lens, as in aphakia, the latter being often very marked in nystagmus. An artificial hippus occurs during the beginning of the action of calabar bean, according to Graefe; hence this state is referred by most oculists to a spasm of the third nerve.

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## ART. II.—SOME PRACTICAL OBSERVATIONS ON EXOPHTHALMIC GOITRE AND ITS TREAT- MENT.\*

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NO case of Graves' or Basedow's disease can be considered complete, without the presence of three characteristic phenomena: irregular and rapid action of the heart; enlargement of the thyroid body, and exophthalmos. This group of symptoms is so familiar under the designation of *exophthalmic goitre*, that it would be a reflection on the intelligence of this body to occupy time with an account of its clinical history. But many cases are met with, in which but one or two of the typical symptoms are present. As regards the relative frequency of the physiognomonical characteristics, the increased action of the heart stands first, the enlargement of the thyroid second, and the exophthalmos third. It is, no doubt, true that many cases of rapid action of the heart with paroxysmal palpitations, have their origin in the same pathological state; but owing to causes at present not known, the other symptoms are not produced, and the cases do not proceed to their full development. It is equally certain, that many cases of so-called *goitre* are really examples of Graves' disease—the enlargement of the thyroid, only, attracting attention. The capital distinction

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been studied are accidental. Thus M. Fereol communicated to the Society of the Hospitals the particulars of a case, in which in addition to exophthalmic goitre, there existed the symptoms of a spinal sclerosis (*Bulletin Général de Thérap.*, Vol. LXXXVII., p. 473). The changes in the thyroid, *except the dilatation of the vessels*, belong to ordinary goitre, so-called. The anatomical alterations in the ganglia of the sympathetic which have been observed, are not found in all cases. The functional troubles of the heart and of the cervical vessels, do not, therefore, represent appreciable organic lesions. The disease should be named accordingly. Our systematic writers classify the disease differently. As I have already stated, Virchow (*Die krankhaften Geschwülste*, dritter band, s. 1), classifies it under the head of "*strumen*," and discusses it in connection with strumous disease of thyroid, with cretinismus, with strumous disease of pituitary body, and of the supra-renal bodies. This is the pathological stand-point. Clinicians usually regard it from the point of view of the most obvious and constant phenomenon—the hyperkinesis of the heart—and class it with the cardiac affections. Such is the arrangement of Trousseau (op. cit.) and of Jaccoud (*Traité de Pathologie Interne*, Tome I re., p. 665), amongst the French, of Niemeyer in Germany (Am. ed.), and of Flint in our own country.

If one should undertake to assign *exophthalmic goitre* to its true nosological position, according to our present physiological knowledge, it should be placed as has been done by Eulenburg and Guttmann, amongst the disorders of the sympathetic.

That the motor influence of the heart is in part, and of the vessels, both of constriction and of dilatation, wholly derived from the sympathetic, must be admitted as established. That the pneumogastric is the regulator of the cardiac movements, seems equally positively determined. The clinical phenomena of Graves' disease, indicate that both sources of nervous supply are disordered—are depressed in function. At all events, it seems evident, that the curative value of the galvanic current is explicable on no other theory.